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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,388	03/20/2001	Takehiro Morishige	520.39903X00	4092

20457 7590 06/28/2004

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EXAMINER

NGUYEN, TRONG NHAN P

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 06/28/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,388

Applicant(s)

MORISHIGE ET AL.

Examiner

Jack P Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/20/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-13 are pending examination.

Drawings

2. The drawings are objected to because of the following informalities:
 - In Figure 1, applicant fails to show items 1 and 8, yet they are mentioned in the Specifications. Applicant is suggested to label these items accordingly using the format of item 12.
 - The word "mobile" is misspelled in Figs. 5, 6, 10, 11, and 12.
3. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as

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per 37 CFR 1.84©) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. Abstract is vague and does not properly describe the claimed invention. Applicant is suggested to make the abstract concise and clear to the reader.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 1, 4, 5, 8, 10, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Applicant is advised to rephrase the claims to state clearly the items that are being claimed.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-7 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramasubramani et al, 6,507,589 (hereafter Ramasubramani).

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11. As per claim 1, Ramasubramani teaches an information providing method on a communication network including a mobile packet communication network accommodating a plurality of mobile terminals via a radio channel and an IP (Internet Protocol) core network to which a server for providing information service is connected (Fig. 1, C5, L58-61), said mobile packet communication network and the IP core network being connected via a gateway apparatus (Fig. 1, C6, L10-11), the method comprising the steps of:

making a request from a service management node for managing visit location information of each mobile terminal in said mobile packet communication network to said gateway apparatus to set management information for providing information service to a mobile terminal, in an execution process of a procedure for accommodating the mobile terminal to said mobile packet communication network (Fig. 9, C3, L45-51); and

registering management information regarding said mobile terminal into a management table by said gateway apparatus in response to reception of said setting request (Fig. 9, C13, L51-53), checking whether a service request has been issued to a service provider with respect to information service indicated by a service identifier included as a part of said management information (Fig. 9, C13, L53-56 and Fig. 2, C6, L25-29) and, making a request by said gateway apparatus to a specific server in said IP core network as said service provider to start the information service if a service request has not been issued (Fig. 2, C6, L29-33).

12. As per claim 2, Ramasubramani teaches an information providing method according to claim 1, wherein said service management node requests setting of said management information designating at least an address of said mobile terminal and an identifier of information service to be provided (Fig. 12A, C15, L25-34), and said gateway apparatus registers said management information including the information designated by said setting request and attribute information regarding said mobile terminal obtained from other server, into said management table (Fig. 12A, C15, L35-43).

13. As per claim 3, Ramasubramani teaches an information providing method according to claim 1, wherein when a packet including service information is received from said specific server (Fig. 12B, C15, L44-45, L50-52), said gateway apparatus refers to said management table and transfers said received packet to said mobile packet communication network by using the address of said mobile terminal registered as a part of the management information as a destination (Fig. 12B, C15, L54-65).

14. As per claim 4, Ramasubramani teaches an information providing method according to claim 1, wherein said gateway apparatus has:

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a first management table for storing, in correspondence with each service identifier, an address of a server operating as a provider of service, a destination address to be attached to a service information packet, and status information indicative of whether a service request has been issued or not (Fig. 3, C7, L1-8; Fig. 5A, C8, L20-35); and

a second management table for storing management information regarding said mobile terminal is registered (Fig. 13, C16, L59-67 and C17, L1-5), and when a packet including the service information is received from said specific server, said gateway apparatus specifies a service identifier corresponding to said received packet with reference to said first management table, searches said second management table for a management information record including said service identifier to thereby specify an address of a mobile terminal to which said received packet is to be transferred, and transfers said received packet or a duplicate of said received packet to said address (Fig. 13, C17, L49-59).

15. As per claim 5, Ramasubramani teaches an information providing method according to claim 4, wherein a filtering condition is designated in correspondence with a specific service identifier in said first management table (Fig. 6, C9, L25-39), and when a packet including service information is received from said specific server, in the case where a filtering condition is designated in correspondence with a service identifier specified in said first management table, said gateway apparatus uses an address of a mobile terminal of which management information satisfies said filtering

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condition among addresses of mobile terminals specified in said second management table as a destination of said received packet (Fig. 2, C6, L27-33; Fig. 3, C8, L66-67 & C9, L1-7.)

16. As per claim 6, Ramasubramani teaches an information providing method according to claim 4, wherein said second management table permits registration of a plurality of service identifiers with respect to a single mobile terminal (Fig. 6, C6, L29-33. *A single mobile terminal may have access or subscribe to multiple service providers as illustrated in the examples – email and stock quotes services.*)

17. As per claim 7, Ramasubramani teaches an information providing method according to claim 3, wherein said gateway apparatus converts a destination address of a packet received from said specific server from a global IP address to a local IP address, and transfers the resultant to said mobile packet communication network (Fig. 13, C17, L52-59.)

18. As per claim 10, Ramasubramani teaches a gateway apparatus for connecting a mobile packet communication network accommodating a plurality of mobile terminals via a radio channel, and an IP (Internet Protocol) core network to which a server for

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providing information service is connected (Fig. 2, C5, L58-61 & C6, L25-27),
comprising:

means for registering management information regarding said mobile terminal into a management table when a setting request of the management information for information service to said mobile terminal is received from a service management node for managing a visit location of the mobile terminal in said mobile packet communication network (Fig. 9, C13, L45-56), and if a service request of information service for said mobile terminal has not been made to a service provider, requesting a specific server as said service provider to start the information service (Fig. 2, C6, L29-33); and

packet transferring means for specifying when a packet including service information is received from said specific server (Fig. 12B, C15, L44-45, L50-52), an address of a mobile terminal, to which information service by said received packet is to be provided, based on said management table and transferring said received packet to said mobile packet communication network by using the address as a destination address (Fig. 12B, C15, L54-65.)

19. As per claim 11, Ramasubramani teaches a gateway apparatus according to claim 10, wherein said packet transferring means includes means for receiving a packet including said service information in a multicast packet format from said specific server and transferring the packet in a unicast packet format to a mobile terminal specified by said management table (Fig. 2, C6, L11-18).

20. As per claim 12, Ramasubramani teaches a gateway apparatus according to claim 10, wherein said packet transferring means includes means for converting a destination address of a packet received from said specific server from a global IP address to a private IP address, and transferring the resultant packet to said mobile packet communication network (Fig. 13, C17, L52-59).

21. As per claim 13, Ramasubramani teaches a gateway apparatus according to claim 10, further comprising:

a first management table for storing, in correspondence with a service identifier, an address of a server as a provider of service, a destination address to be attached to a service information packet, and status information indicative of whether a service request has been issued or not (Fig. 3, C7, L1-8; Fig. 5A, C8, L20-35); and

a second management table for storing management information regarding said mobile terminal (Fig. 13, C16, L59-67 & C17, L1-5), and wherein when a packet including the service information is received from said specific server, said received packet transferring means specifies a service identifier corresponding to said received packet with reference to said first management table, searches said second management table for a management information record including said service identifier to thereby specify an address of a mobile terminal to which said received packet is to be transferred, and

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transfers said received packet or a duplicate of said received packet to said mobile terminal address (Fig. 13, C17, L49-59).

22. Claims 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hall et al, 6,414,962 (hereafter Hall).

23. As per claim 8, Hall teaches an information providing method on a communication network including a mobile packet communication network accommodating a plurality of mobile terminals via a radio channel and an IP (Internet Protocol) core network to which a server for providing information service is connected (Fig. 1, C2, L33-41), said mobile packet communication network and the IP core network being connected via a gateway apparatus (Fig. 1, C2, L42-44), the method comprising the steps of:

making a request from a service management node for managing a visit location of each mobile terminal in said mobile packet communication network to said gateway apparatus to set management information for providing information service to a mobile terminal by designating a mobile terminal address and an information service identifier at the time of registering location of the mobile terminal in said mobile packet communication network (Fig. 1, C4, L8-13); and

registering the management information regarding said mobile terminal into a management table by said gateway apparatus having received said setting request,

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checking whether a service request has been issued to a service provider with respect to information service to be provided to said mobile terminal and, making a request to a specific server as said service provider to start the information service when a service request has not been made (Fig. 1, C4, L14-27).

24. As per claim 9, Hall teaches an information providing method according to claim 8, wherein when said gateway apparatus registers the management information regarding a mobile terminal into a management table, location information obtained from a location information server for managing geographical local information of each mobile terminal in said mobile packet communication network is registered as a part of the management information into said management table (Fig. 1, C3, L29-33; C4, L8-13), and

when a packet designating a delivery area as information service is received from said specific server, said gateway apparatus refers to said management table to select an address of a terminal to which said received packet is to be delivered among a group of mobile terminals of which present location is in said designated area, and transfers said received packet to said mobile packet communication network by using said address as a destination address (Fig. 1, C4, L14-27).

Conclusion

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25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Method, Subscriber Device, Wireless Router, and Communication System Efficiently Utilizing the Receive/Transmit Switching Time – Jones et al, 6,490,256 – invention provides a subscriber device method, wireless router, and communication system.
- Method and Apparatus For Informing Wireless Clients About Updated Information – Fox et al, 6,654,796 – unified interface for sending update notifications to different wireless clients on different wireless networks.
- Radio Communication System For Push Technology – Tari et al, 6,704,295 – information distribution and a server that reliably delivers information to a mobile terminal and a push-type control method for an information monitoring device.
- Network Hub for Interconnecting a Wireless Office Environment With a Public Cellular Telephone Network – Lindgren et al, 6,411,632
- Public Wireless/Cordless Internet Gateway – Farris et al, 6,721,306 – wireless gateway system provides wireless telephone connection and provides access to a public packet data network, such as the Internet, for at least voice telephone type communications.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P Nguyen whose telephone number is (703) 605-4299. The examiner can normally be reached on M-F 8:30-5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn



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